

CLAIMS LISTING

1. (currently amended) A method for suppressing an explosion in a fuel tank, comprising: installing into the tank a reticulated polyurethane foam having a density less than 1.0 pounds per cubic foot [16 kg/m³], and having a volume electrical resistivity of less than 10¹² ohm-cm at 70°F [21.1°C].
2. (original) The method of claim 1, wherein the polyurethane foam has a density of from 0.6 to 0.9 pounds per cubic foot [9.6 to 14.4 kg/m³].
3. (cancelled)
4. (original) The method of claim 1, wherein the polyurethane foam is reticulated by thermal reticulation.
5. (original) The method of claim 1, wherein the tank has an inner volume and the foam fills from 50 to 90% of the inner volume of the tank.
6. (original) The method of claim 1, wherein the fuel tank is an aircraft fuel tank.
7. (withdrawn) A three dimensional structure for use as an explosion suppressing material in a fuel tank,
comprising:
a reticulated polyurethane foam prepared by (i) reacting at least one polyester or polyether polyol or a mixture of such polyols and at least one isocyanate compound under foaming conditions to produce a polyurethane foam having a density less than 1.0 pounds per cubic foot [16 kg/m³], and (ii) reticulating said polyurethane foam.

8. (withdrawn) The structure of claim 7, wherein the polyurethane foam has a density of from 0.6 to 0.9 pounds per cubic foot [9.6 to 14.4 kg/m³].

9. (withdrawn) The structure of claim 7, wherein one or more antistatic agents are added when the polyurethane foam is formed, and the polyurethane foam has a volume electrical resistivity of less than 10¹² ohm-cm at 70°F [21.1°C].

10. (withdrawn) The structure of claim 7, wherein the polyurethane foam is reticulated by thermal reticulation.

11. (withdrawn) The structure of claim 7, wherein the polyurethane foam is formed under vacuum foaming conditions.

12. (new) The method of claim 1, wherein one or more antistatic agents is added to a foam-forming mixture used to prepare the reticulated foam, such antistatic agents being selected from the group consisting of: quarternary ammonium compounds, quarternary ammonium salts of alkyl sulfuric acid and carboxylic acid, metallic salts of lithium, sodium, potassium, ammonium, calcium and barium, complexes of metallic salts with polyhydric alcohols and their derivatives, such as 1,4 butanediol, ethylene glycol, propylene glycol and polyethylene glycol, complexes of metallic salts with mono-ols, such as ethylene glycol monomethyl ether and ethylene glycol monoethyle ether, hexahalogenated ionic compounds, hexahalogenated phosphate compounds, potassium hexafluorophosphate, sodium hexafluorophosphate, ammonium hexafluorophosphate, and carbon black.

13. (new) The method of claim 12, wherein the antistatic agents is/are metallic salts.

14. (new) The method of claim 12, wherein the antistatic agents is/are added in amounts from 0.1 to 20 parts per hundred parts polyol.